

**MEMORANDUM****DATE:** May 2, 2000**SUBJECT:** **Enforcement ACTION MEMORANDUM** - Determination of Threat to Public Health and the Environment at the Johns-Manville Site, Waukegan, IL**FROM:** Brad Bradley  
On-Scene Coordinator**TO:** William E. Muno, Director  
Superfund Division**I. PURPOSE**

We have determined that the presence of asbestos-contaminated soils and waste in excess of the United States Environmental Protection Agency (EPA) established standards as set forth in 40 C.F.R. § 261.24 poses an imminent and substantial threat to public health and the environment, which qualifies Johns-Manville Sites 2 and 3 in Waukegan, Illinois (the Sites) for a Removal Action. The Sites consist of land adjacent to a former asbestos manufacturing facility, which has asbestos-containing material (ACM) at and near the ground surface.

Potentially Responsible Party (PRP) asbestos response actions have been taken pursuant to a directive from On-Scene Coordinator (OSC) Brad Bradley and pursuant to the Remedial Design/Remedial Action (RD/RA) Consent Decree with Johns-Manville. (please see confidential enforcement addendum). These response actions have mitigated some of the human health threats by removing much of the surficial ACM in the impacted areas. The threats identified in Section III necessitate that this removal be classified as a time-critical removal action. This site is adjacent to and was derived from the Johns-Manville Superfund site, which is on the National Priorities List (NPL). This action is consistent with and complements the proposed redevelopment of the Johns-Manville site into a sports complex.

**II. SITE CONDITIONS AND BACKGROUND****A. PHYSICAL LOCATION**

Johns-Manville Sites 2 and 3 are both located on the south side of Greenwood Avenue, east of Pershing Road in Waukegan, Illinois (see Figure 1). The Sites are located between the Johns-Manville Superfund Site and Commonwealth Edison and are adjacent to Lake Michigan. A

parking lot and recreational area (fishing pier) are located on and immediately adjacent to Site 2. The nearest residential areas are approximately ½ mile from the Sites. All of Site 3 and part of Site 2 have unrestricted access.

#### **B. SITE DESCRIPTION AND BACKGROUND**

Site 2 is situated primarily on City of Waukegan property, and is currently managed by the Illinois Department of Natural Resources (IDNR) as an access to the Commonwealth Edison fishing pier. A shooting range was constructed on Site 2 in 1959, in conjunction with the Pan Am Games that was hosted by the City of Chicago that year. A series of berms were constructed on Site 2 to prevent bullets from leaving the range and traveling onto adjacent properties. In the late 1960s, the berms on Site 2 were bulldozed nearly to grade. The easternmost berm was graded to the edge of Lake Michigan, and was partially consumed by the lake during periods of high water levels in the 1970s. The dimensions of Site 2 are approximately 300 feet by 1500 feet.

Site 3 was formerly used as a parking area for the former Johns-Manville administration building. The parking lot was constructed, using ACM fill material on grade, in the late 1950s. Use of the parking lot ceased when the Amstutz Highway was constructed in the late 1960s.

#### **C. CURRENT SITE CONDITIONS**

Sites 2 and 3 are adjacent to and are derived from the Johns-Manville Superfund Site. Manufacturing activities at the Johns-Manville facility ceased in 1998. Surficial ACM at the Sites was picked up and disposed of by Johns-Manville in December 1998. Subsequent sampling conducted by ELM Consulting, Johns-Manville's contractor, indicated that several sub-areas of the Sites (based on 100 feet by 100 feet grids) contained ACM at depths of up to three feet. Some ACM may be located at greater depth, but sampling was not conducted below three feet. No lead-bearing materials (i.e. bullet fragments) were found in any of the samples collected at Site 2. On June 14, 1999, representatives of IDNR discovered friable ACM that had been exposed via erosion along the walking path between the north shore of the cooling water intake to the then Commonwealth Edison fossil fuel plant and the parking lot. The IDNR representatives collected the piece of friable ACM and double-bagged it for storage. The sample was analyzed in March 2000, and the piece of ACM was found to contain 40-45% asbestos.

### **III. THREAT TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES**

Conditions at the Sites meet the criteria for a removal action as stated in National Contingency Plan, Section 300.415, Paragraph (b)(2). 40 C.F.R. §§ 300.415(b)(2)(i), (iv), and (v), respectively, specifically allow removal actions for:

**a) Actual or potential exposure to hazardous substances or contaminants by nearby human populations, animals or the food chain from hazardous substances, pollutants or contaminants:**

This factor is present due to the existence of ACM, some of which is friable, at and near the ground surface at the Sites. A sample of friable asbestos at Site 2 was analyzed and found to contain 40-45% asbestos. Also, there is unrestricted access to all of Site 3 and a portion of Site 2.

**b) High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;**

This factor is present at the Sites due to the existence of high asbestos levels on site. Asbestos migration onto adjacent properties may occur via airborne dust from the site. Friable asbestos, such as that observed at the ground surface at Site 2, is particularly susceptible to airborne migration. The friable asbestos at Site 2 was found along the walking path to the Commonwealth Edison fishing pier, and area that receives substantial recreational use. Further ACM may be exposed in some areas of the Sites by erosion from rainfall events.

**c) Weather condition that may cause hazardous substances or pollutants or contaminants to migrate or be released;**

This factor is present at the Sites due to the existence of surficial ACM that may migrate into adjacent areas via airborne dust during dry periods and/or periods of high winds or via surface runoff during heavy rains.

#### **IV. ENDANGERMENT DETERMINATION**

The actual or threatened release of hazardous substances from the Site may present an imminent and substantial endangerment to the public health, welfare, or the environment within the meaning of Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

#### **V. PROPOSED ACTION**

Remediation of ACM on the Sites is proposed. The cleanup should be performed in accordance with State of Illinois requirements. Pursuant to letters from EPA dated March 20, 1998, and April 29, 1998, Johns-Manville (JM) was required to conduct the following response actions:

- A. fully characterize the nature and extent of the contamination at the Sites, and
- B. meet with EPA to discuss cleanup options with all interested parties and develop disposal options and time lines for completion of such options.

JM has performed these activities. The proposed remedy for the Sites is as follows:

- A. Develop and implement a Site Safety and Health Plan;

- B. Provide and maintain site security around contaminated areas;
- C. Post warning signs around the contaminated areas;
- D. Submit a Removal Action Work Plan, which will contain a description of the response action to be taken, an implementation schedule, and a list of personnel involved in implementing the response action;
- E. Excavate grid areas previously identified as containing ACM with greater than one percent asbestos to a maximum depth of two feet and disposal of the excavated material in the Settling Basin on the Johns-Manville facility or off-site in an approved landfill;
- F. Place a suitable barrier (e.g. orange snow fence) in any excavated grid areas where ACM with greater than one percent asbestos extends deeper than two feet below the ground surface;
- G. Place suitable, contaminant-free backfill in excavated areas and grading of such backfill to a smooth, level surface, with proper drainage;
- H. Establish a vegetative layer over the backfilled areas; and
- I. Prepare and submit a summary report of the removal action.

The Remedial Project Manager/OSC has begun planning for the provision of post-removal site control, consistent with the provisions of Section 300.415(k) of the NCP. The nature of this removal will minimize post-removal site control.

The response actions described in this Action Memorandum directly address actual or threatened releases of hazardous substances, pollutants, or contaminants at the facilities in the affected area which may pose an imminent and substantial endangerment to public health and the environment. These response actions do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed. These response actions are consistent with and complement the proposed redevelopment of the Johns-Manville site into a sports complex.

All applicable or relevant and appropriate requirements (ARARs) will be complied with to the extent practicable. Any State ARAR identified in a timely manner for this removal action will be complied with to the extent practicable. A letter outlining State ARARs is included in the Administrative Record (Attachment A).

**VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN**

Delayed or non-action may result in increased likelihood of inhalation of airborne asbestos fibers from the site.

**VII. OUTSTANDING POLICY ISSUES**

There are no outstanding policy issues associated with this Site.

**VIII. ENFORCEMENT**

For administrative purposes, information concerning confidential enforcement strategy for this Site is contained in the Enforcement Confidential Addendum.

**IX. RECOMMENDATION**

This decision document represents the selected removal action for Sites 2 and 3 at the Johns-Manville Site located in Waukegan, Lake County, Illinois, developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision is based upon the Administrative Record for the JM Site. Conditions at the Sites meet the NCP Section 300.415 (b)(2) criteria for a removal action. You may indicate your decision by signing below

APPROVE:

  
Director, Superfund Division

DATE:

5/2/00

DISAPPROVE:

\_\_\_\_\_  
Director, Superfund Division

DATE:

Attachments: A. Administrative Record

B. Confidential Enforcement Addendum

U.S. ENVIRONMENTAL PROTECTION AGENCY  
REMOVAL ACTION  
ADMINISTRATIVE RECORD  
FOR  
THE JOHNS-MANVILLE ADDITIONAL SITES 2 AND 3  
WAUKEGAN, ILLINOIS

ORIGINAL  
APRIL 20, 2000

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
1	03/20/98	Bradley, B., U.S. EPA	Clinton, D., Johns Manville Corporation	Letter re: Development of a Draft Work Plan and Analytical Information for the Johns Manville Manville Roadway and Pier Sites	3
2	04/03/98	Ray, B., Johns Manville International	Vezner, K., U.S. EPA	Characterization Plan for Additional Sites at the <i>Johns Manville Site w/ Attached Cover Letter</i>	9
3	04/29/98	Bradley, B., U.S. EPA	Clinton, D., Johns Manville Corporation	Letter re: U.S. EPA's Approval for JM to Begin the Activities Specified in the April 3, 1998 <i>Characterization Plan for Additional Sites at the Johns Manville Site</i>	1
4	07/10/98	Bradley, B., U.S. EPA	Clinton, D., Johns Manville Corporation	Letter re: U.S. EPA's Approval, with Modifica- tions, of the April 3, 1998 <i>Characterization Plan for Additional Sites for the Johns Manville Site (INCOMPLETE)</i>	1
5	11/25/98	Stringer, J., ELM Consulting, L.L.C.	Bradley, B., U.S. EPA	<i>Surface and Subsurface Characterization for Site 2 and Site 3 Work Plan (Version 2) for the Johns Manville Manufacturing Facility w/Attached Cover Letter</i>	45
6	02/03/99	Stringer, J., ELM Consulting, L.L.C.	Bradley, B., U.S. EPA	Surface and Subsurface Characterization Draft Summary Maps and Data for Site 2 and Site 3 at the Johns Manville Manufacturing Facility w/ Cover Letter	43

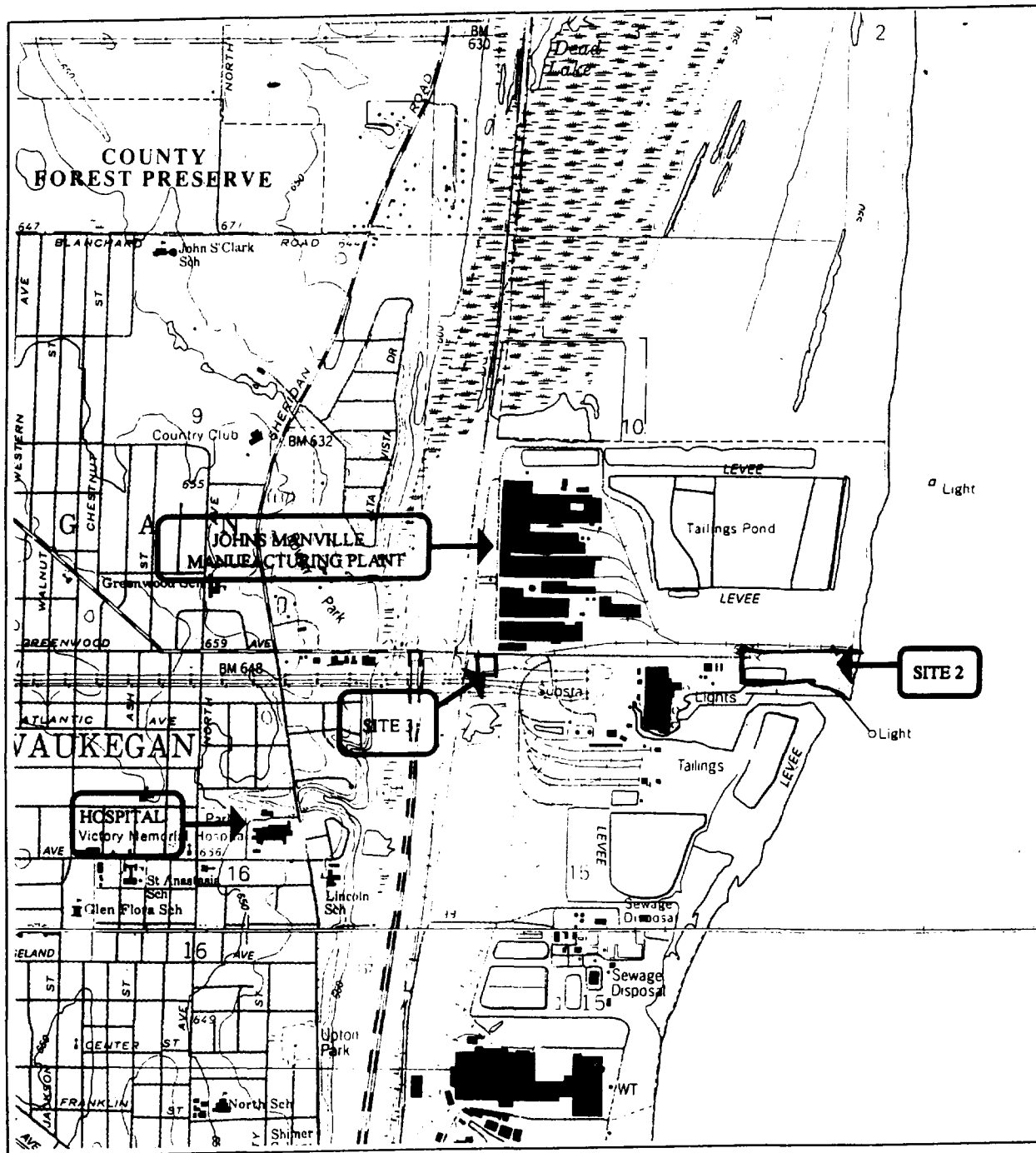
<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
7	05/24/99	Bradley, B., U.S. EPA	Clinton, D., Johns Manville Corporation	Letter re: U.S. EPA's Approval of the February 3, 1999 Surface and Sub- surface Characterization Draft Summary Maps and Data Document for the Johns Manville Site	1
8	06/18/99	Davis, S., Illinois Department of Natural Resources	File	Trip Report for the June 14, 1999 Visit to Site 2 at the Johns Manville Site	1
9	08/00/99	Center for Toxicology and Environ- mental Health	Johns Manville International	Risk Assessment for Public Use of Waukegan Additional Site #2 (Rifle Range/Fishing Pier Access) [DRAFT] for the Johns Manville Manufacturing Facility	14
10	08/09/99	U.S. EPA	File	Cost Summary Sheet for Johns Manville Additional Sites 2 and 3 (DRAFT)	1
11	08/10/99	Clinton, D., Johns Manville Corporation	Bradley, B., U.S. EPA and B. Wallace, Office of Illinois Attorney General	FAX Transmission re: Summary of Remedial Alter- natives and Estimated Costs for Site 2 and Site 3 at the Johns Manville Site	10
12	03/07/00	Bron, S., Illinois EPA	Bradley, B., U.S. EPA	Letter re: IEPA's Comments on Johns Manville's Proposed Voluntary Removal Action at the Waukegan Additional Sites 2 and 3 w/Attached IEPA Summary Sheet for ARAR Review	7
13	03/21/00	Draugelis, A., U.S. EPA	Bradley, B., U.S. EPA	Memorandum re: Comments on Johns Manville Site 2 Draft Risk Assessment	2
14	03/29/00	Frejek, R., TEM, Incorporated	Henry, M., Illinois Department of Natural Resources	Letter re: Analytical Results for Friable Asbestos Samples	3

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
15	05/02/00	Bradley, B., U.S. EPA	Muno, W., U.S. EPA	Enforcement Action Memorandum: Determination of Threat to Public Health and the Environment at the Johns-Manville Site (PORTIONS OF THIS DOCUMENT HAVE BEEN REDACTED)	12



# Figure 1

Johns Manville Manufacturing Plant, Site 2 and Site 3  
Waukegan, Illinois



**FIGURE - 1**  
Approximate  
Site Location Map

USGS 7.5 Minute Topographic Maps  
Waukegan/Zion Quadrangles  
Contour Interval = 10'  
Scale 1" = 2000'



cc: K. Mould, U.S. EPA HQ, 5202G  
M. Chezik, U.S. Department of Interior, w/o Enf. Addendum  
Sandra Bron, Illinois EPA, w/o Enf. Addendum  
Thomas Skinner, Illinois EPA w/o Enf. Addendum  
Steve Davis, Illinois DNR w/o Enf. Addendum  
Beth Wallace, IAG w/o Enf. Addendum

**JOHNS-MANVILLE ADDITIONAL SITES 2 AND 3  
WAUKEGAN, COOK COUNTY, ILLINOIS  
ORIGINAL AR**

**DOCUMENT #15**

**"Enforcement Action Memorandum - Determination of Threat to Public Health and the Environment at the Johns-Manville Site, Waukegan, IL"**

**ATTACHMENT B  
CONFIDENTIAL ENFORCEMENT ADDENDUM  
2 PAGES**

**REDACTED**

**NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION**